

REMARKS/ARGUMENTS

Reconsideration of this application in light of the above amendments and the following remarks is requested.

In regard to the paragraph 1 of the Office Action applicant confirms that claims 1-49 are pending, claims 8-21, 30-35, 39-49 are withdrawn from consideration and claims 1-7, 22-29 and 36-39 are under prosecution.

In regard to the paragraph 2 of the Office Action the examiner is authorized to delete the objectionable incorporation by reference at page 1 (no paragraph numbering available for amending by applicant) by Examiner's amendment.

Claims 1, 3, 5, 22, 25, 28, and 37 have been amend to clarify the claimed subject matter and to comply with the examiner's rejections and objections including the rejections under 35 USC 112 as set forth in paragraph 7 of the office action..

In regard to claim 1 the Examiner asserts that the specification does not teach or describe the "layer surface." However, on page 4, lines 21 to 30 of the English translation of the specification, there is the following description:

"The aforementioned 'correspondence' should preferably be achieved by relating the position on the layer surface (integrated surface) formed from the layered structure generated by integrating the base member by rolling, lamination or arrangement. The layer surface is not necessarily a flat planar surface, and may also be an irregular surface, or a coiled or curved surface. Furthermore, suitable techniques for integration include flat rolling, laminating or arranging to produce a flat plane, or alternatively cylindrical or prismatic rolling, laminating or arranging to form a cylinder, a prism, a circular cone, or a pyramid, as well as rolling, laminating or arranging in the manner outlined below in the third aspect of the invention."

Also, on page 29, lines 8 to 11, the following is stated:

"FIG. 1 is a diagram showing an example of an integrated support (or an integrated minute vessels or a permeable membrane, hereafter referred to as 'integrated medium') according to a first embodiment, viewed from the layer surface (the integrated surface) thereof."

Furthermore, in claims 4, 11, 14, 20, 26, 31, and 38 as originally filed, as well as in the specification at page 30, lines 6 to 7, and on page 44, lines 16 to 19, the words,

"layer surface" are described or shown. It is therefore requested that this objection be withdrawn.

The recitation in claim 1 - "said base member is integrated so that a layer surface in which the substances are fixed and are adapted to be formed in the direction of the length of said base member" - has been replaced with the words, "said base member is integrated so that a layer surface in which the substances are fixed, is able to be formed" on the basis of the following description on page 4, lines 21 to 23 of the English translation of the specification:

"The aforementioned 'correspondence' should preferably achieved by relating to the position on the layer surface (integrated surface) formed from the layered structure generated by integrated the base member by rolling, lamination or arrangement."

Also, claim 1 has been amended to included the expression "said base member is integrated to form a cylinder, a prism, a circular cone, or a pyramid."

The expression "at intervals" has been deleted from claims 1 and 22.

In regard to the claims 37 and 38, the Examiner asserts that "layer surface" is not described in the specification. However, as mentioned above, the expression "layer surface" is disclosed in the specification and is explained as being used to achieve 'correspondence' by relating the position (page 4, line 25). It is noted that, for reasons to be discussed, this expression has been deleted from claim 37.

With regard to the rejection claim 1 over the applied patent to Stimpson as set forth in paragraph 11 of the office action, it is noted that the Stimpson disclosure is limited to an arrangement where the substances for detection are fixed, flat planes, as described on paragraph 6, line 66 to paragraph 7, line 1 and shown in Fig. 2E of the Stimpson patent. In contrast, amended claim 1 recites that the base member is integrated to form a cylinder, a prism, a circular cone, or a pyramid, as described on page 4, lines 27 to 30 of the English translation of the specification. Hence, with the present invention, the integrated support can be formed so as to be compact and dense

in comparison with Stimpson, since the maximum projected area of the integrated support of a solid body (i.e., a cylinder, a prism, a circular cone, or a pyramid) can be formed so as to be smaller than that of flat plane. Therefore, generally, a volume of reagent liquid necessary to react to the integrated support of solid body in the vessel is sufficient to be smaller than that of flat plane. Therefore, reaction between reagents and substances for detection can be efficiently carried out. Therefore, the integrated support of the present invention now defined in claim 1 is not only distinct from that of Stimpson, but also has aforementioned advantages. Hence claim 1, and therefore dependent claims 2-6, distinguish over the Stimpson reference and are in condition for allowance.

Claim 22, which was rejected over the patent to Stimpson as set forth in paragraph 11 of the office action, recites the steps of rolling a base member which is selected from the group consisting of a thread shape, a string shape, a tape shape, and a long and slender shape where various kinds of substances are fixed. Thus the integrated support is manufactured without cutting a rolled sheet which minimizes losses of substances for detection fixed to the base member. In contrast with the method of Stimpson, the array is manufactured in a manner that, after all reagents are applied, the take-up spool is bound and cut into individual arrays as described on paragraph 8, lines 47 to 48.

Consequently the method of claim 22 is not only distinct from that of Stimpson, but also has aforementioned advantage. Therefore, claim 22, and therefore dependent claims 23 to 29, and 36 distinguish over the Stimpson reference and are in condition for allowance.

In view of the foregoing an early formal Notice of Allowance is requested. Should the Examiner have any questions or comments regarding the amendment, the Examiner is invited to telephone the undersigned at the number listed below.


The Commissioner is hereby authorized to charge payment of any further fees associated with any of the papers submitted herewith or to credit any overpayment to Deposit Account No. 08-1394.

Respectfully submitted,



Warren B. Kice
Reg. No. 22,732

Date: 8/12/03
Haynes and Boone, LLP.
901 Main Street, Suite 3100
Dallas, Texas 75202-3789
Telephone: 214-651-5634
Facsimile: 214-651-5940
File: 10287.41
d-1157801.1

EXPRESS MAIL NO.: <u>EV 333437993WS</u>
DATE OF DEPOSIT: <u>August 12, 2003</u>
This paper and fee are being deposited with the U.S. Postal Service Express Mail Post Office to Addressee service under 37 CFR §1.10 on the date indicated above and is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
SANDRA KUBIN
Name of person mailing paper and fee

Signature of person mailing paper and fee